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APPLICATION NO.	FILN	NG DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/566,229	01/	/27/2006	Young-Jin Hyun	2017-66	. 3699	
52706 IPLA P.A.	7590	04/04/2007		EXAMINER		
3580 WILSHIRE BLVD.				ROSS, DANA		
17TH FLOOR LOS ANGELES, CA 90010		010		ART UNIT	PAPER NUMBER	
	•			3722		
	•			MAIL DATE	DELIVERY MODE	
				04/04/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplimental	
Notice of Allowability	/

Application No.	Applicant(s)	
10/566,229	HYUN, YOUNG-JIN	
Examiner	Art Unit	
Dana Ross	3722	

Aladia a R. Allassa Lilla	10/300,223	111014, 100140-3114	
Notice of Allowability	Examiner	Art Unit	
·	Dana Ross	3722	
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not include will be mailed in due	ed course. THIS
1. This communication is responsive to <u>1/27/06</u> .			
2. The allowed claim(s) is/are <u>1-5</u> .		,	
 Acknowledgment is made of a claim for foreign priority una a) All b)	been received. been received in Application No cuments have been received in this of	national stage applica	
4. A SUBSTITUTE OATH OR DECLARATION must be subminification (PTO-152) which give			IOTICE OF
5. CORRECTED DRAWINGS (as "replacement sheets") mus	t be submitted.		
(a) including changes required by the Notice of Draftspers	on's Patent Drawing Review (PTO-	948) attached	
1) 🗌 hereto or 2) 🔲 to Paper No./Mail Date			
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date		,	
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in the	.84(c)) should be written on the drawir he header according to 37 CFR 1.121(c	ngs in the front (not the d).	back) of
DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT	sit of BIOLOGICAL MATERIAL n FOR THE DEPOSIT OF BIOLOGICA	nust be submitted. (AL MATERIAL.	Note the
Attachment(s) 1. ☑ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 7. ☐ Examiner's Amenda 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), e nent/Comment	owance

Application/Control Number: 10/566,229

Art Unit: 3722

Allowable Subject Matter

1. Claims 1-5 are allowed.

The following is an examiner's statement of reasons for allowance: The prior art neither anticipates nor renders obvious an apparatus for detecting a position of a drawbar unit of an automatic tool exchange device as claimed in independent claim 1, specifically wherein the combination of limitations of the drawbar unit includes the core, coil section, LC oscillator and position detecting section as claimed.

US Pat. No. 5,613,929 (Bayer) teaches a spindle drive motor which is advanced and retracted with a drawbar 121 assembly located inside the spindle for coupling to a tool holder adapter mounted in a tool change magazine (see figure 3b, for example).

Bayer does not teach or suggest the drawbar unit with the core, coil section, LC oscillator, or position detecting section as claimed.

Therefore Bayer does not anticipate the claimed invention.

US Pat. No. 6,477,928 (Newell et al.) teaches a lathe with a drawbar 58 with alignment mechanism 50 and adapter 54 (see figure 4, and col. 7, lines 14-29, for example) with a number of different sensing configurations as part of the sensing mechanism and control mechanism, one sensing device is the use of an accelerometer with a coil 435 and coil oscillator (see col. 15, lines 38-41, for example) and an F/V converter 439 (see col. 15, line 66 - col. 16 line 3, for example), the use of magnet 450 (see col. 16, lines 9-10 and lines 56-57); a coil spring (section) to open the core (solenoid) (see col. 18, lines 55-65, for example), an A/D converter 620 (see col. 18, lines 3-5, for example).

Newell does not disclose detecting the position of a drawbar unit of an automatic tool exchange device or the specifics of the LC oscillator or main controller.

Therefore Newell does not anticipate the claimed invention.

US Pat. No. 5,619,133 (Shank et al.) teaches a control circuit coupled to a conductive coil for use on machine tools (col. 12, lines 10-13, for example) with an LC oscillator 142, coil 204 (see col. 7, lines 59-67, for example) F/V converter 260 and a controller (col. 3, lines 50-53, for example).

Shank does not disclose the specifics of the drawbar or the drawbar unit of an automatic tool exchange device.

Therefore Shank does not anticipate the claimed invention.

Furthermore, there is no prior art, either alone or in combination with the above cited prior art, that would render obvious the claimed invention, and no motivation found to modify the prior art to obtain the claimed invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3722

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dana Ross whose telephone number is 571-272-4480. The examiner can normally be reached on Mon-Thurs.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Monica Carter can be reached on 571-272-4475. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dana Ross Examiner Art Unit 3722

dmr